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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,809	07/18/2002	Carlo Ghisalberti	MARGI 33	9569
23599	7590	07/02/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201				LILLING, HERBERT J
		ART UNIT		PAPER NUMBER
		1651		

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/070,809	GHISALBERTI, CARLO
	Examiner	Art Unit
	HERBERT J LILLING	1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 November 2002.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) _____ is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

1. Receipt is acknowledged of the prior art information disclosure statement filed November 19, 2002.

2. Claims 1-16 are pending in this application which is a 371 of PCT/IB00/01276 filed 09/08/2000.

3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. Evidenced of this is that at least one or more of the inventions lack a special technical patentable concept in view of the prior art of record, e.g. US 5,384,116, FR 2,704,554, DE 197 17 837, WO 96 25920 or JP 03 077813 anticipates Group I claims as noted below. Thus the following requirements are proper for an election of one single invention absent the special single general concept.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, drawn to synthetic melanins.

Group II, claim(s) 7-13, drawn to a method for preparing synthetic vegetal melanins.

Group III, claims 14-15, drawn to cosmetics comprising an active ingredient of at least one vegetal melanins.

Group IV, claim 16, drawn to a pharmaceutical comprising an active ingredient of at least one vegetal melanins.

4. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

An election of species as noted by the following:

A. An election whereby the monomer unit is :

- a. only a monomer unit of a plant polyphenol;
- b. a monomer unit of a plant polyphenol with an eumelanin precursor.

B. Whereby the plant polyphenol is selected from the formula I and X is

i. Formula II flavonoid selected from

- a. quercetin
- b. fisetin
- c. fustin
- d. luteolin
- e. OPC
- f. catechin
- g. epicatechin
- h. GC
- i. GCG,
- j. EGC

- k. EGCG
- l. myricetin
- m. dihydroquercetin
- n. mixtures thereof-please specify which components in the mixture.
- ii. Formula III flavonoid anthocyanins
- a. cyanidin
- b. delphinidin
- c. mixtures thereof.
- iii. Formula IV whereby X is an open ring dihydroxphenol selected from:
- a. hydroxytyrosol
- b. protocathechuic acid
- c. protocathechuic aldehyde
- d. gallic acid
- e. tannic acid
- f. mixtures thereof – please specify the components.
- C. Whereby the eumelanin precursor is selected from
- a. L-dopa
- b. DHI
- c. DHICA
- d. dopamine

- e. pyrocatechol
- f. pyrogallol
- g. mixtures thereof-please specify the components.

D, Whereby the enzyme is selected from the group consisting of

- a. tyrosinases
- b. polypholoxidase
- d. phenolases
- e, peroxidases
- f. laccases
- g. lyxygenase
- h. mixtures thereof-please specify.

E. Whereby the process employs in the reactor as starting material

- a. the plant polyphenol monomer unit
- b. use of premonomer components to form the polyphenol monomer unit selected from:

1. dihydrokaempferol
2. armadendrin
3. p-hydroxybenzaldehyde
4. PHBA
5. tyrosol
6. p-coumaric acid
7. apigenin

8. kaempferol
9. pelargonin
10. genistein
11. tyrosine
12. tyramine
13. 5—hydroxy-indole
14. mixtures thereof-please specify

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention I-V and an election of species, if

appropriate to the elected invention which includes one species from each of A-E, to be examined even though the requirement be traversed (37 CFR 1.143).

6. Applicant is advised that rejoinder of claims will be in accordance with the following:

F.P.: Ochiai/Brouwer Rejoinder form paragraph

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier.** Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's

cooperation is requested in correcting any errors of which applicant may become aware in the specification.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Examiner Lilling whose telephone number is 571-272-0918** and **Fax Number** is (703) 872-9306 or SPE Michael Wityshyn whose telephone number is 571-272-0926. Examiner can be reached Monday-Thursday from about 5:30 A.M. to about 3:00 P.M. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

H.J.Lilling: HJL
(703) 308-2034
Art Unit **1651**
June 30, 2004



Dr. Herbert J. Lilling
Primary Examiner
Group 1600 Art Unit 1651